

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Facilitating the Provision of Spectrum-Based)	WT Docket No. 02-381
Services to Rural Areas and Promoting)	
Opportunities for Rural Telephone Companies)	
To Provide Spectrum-Based Services)	

**COMMENTS OF THE WIRELESS COMMUNICATIONS ASSOCIATION
INTERNATIONAL, INC.**

The Wireless Communications Association International, Inc. (“WCA”) hereby submits its comments in response to the Commission’s December 20, 2002 *Notice of Inquiry* in the above-captioned proceeding.¹

WCA applauds the Commission’s commitment to promoting deployment of rural wireless service, and more particularly wireless broadband service. Historically, WCA has been a staunch advocate of rules and policies that will facilitate rapid delivery of wireless broadband service to areas that cannot or will not be served by cable modem or DSL providers. Indeed, as noted by the Commission elsewhere, “[a]nalysts estimate that for a variety of technical, financial

¹ *Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services*, WT Docket No. 02-381, FCC 02-325 (rel. Dec. 20, 2002). WCA is the trade association of the wireless broadband industry. Its membership includes a wide variety of wireless broadband system operators, equipment manufacturers and consultants interested in the deployment of licensed and unlicensed spectrum for wireless broadband service in, *inter alia*, the 2.1 GHz, 2.3 GHz, 2.4 GHz, 2.5 GHz, 5 GHz, 18 GHz, 24 GHz, 28 GHz, 31 GHz, 38 GHz and 70/80/90 GHz bands. WCA is also the founder of the License-Exempt Alliance (“LEA”), a nationwide coalition of service providers, equipment vendors and others who offer or support the provision of wireless broadband service via the 902-928 MHz, 2.4 GHz and 5 GHz bands under Part 15 of the Commission’s Rules. Whether in its own name or under the auspices of the LEA, WCA has participated in virtually every major Commission proceeding affecting the deployment of licensed and license-exempt spectrum for wireless broadband service. Accordingly, WCA has an immediate and substantial interest in the *NOI* and any further Commission action related to it.

and operations reasons, cable modem and DSL services cannot or will not meet the increasing demand for broadband by themselves.”² More recently, the Commission’s third annual Section 706 Report highlighted the need for aggressive oversight of the problem:

Despite the upward trend in [broadband] subscription rates for rural communities, we note that a positive correlation persists between population density and the presence of high-speed subscribers. In addition, there continues to be a significant disparity in access to advanced services between those living in rural population centers and those living in sparsely-populated outlying areas. As a result, we believe that it is important to closely monitor the availability of advanced services for rural Americans, especially those living outside of the rural population centers, in order to ensure that they receive timely access to advanced services.³

While it is possible to deliver wireless broadband service in a variety of frequency bands, it is beyond argument that Multipoint Distribution Service (“MDS”) and Instructional Television Fixed Service (“ITFS”) spectrum in the 2150-2162 MHz (“2.1 GHz”) and 2500-2690 MHz (“2.5 GHz”) bands is optimally suited for delivery of wireless broadband service to rural areas. The Commission itself has recognized that

[MDS/ITFS] transmissions have a greater radius than upperband fixed wireless service, generally 35 miles versus three to five miles for upperband services. . . [MDS/ITFS’s] larger radius makes the service well-suited for not only residential customers, but customers in rural, underserved, and unserved areas as well.⁴

² “Interim Report – Spectrum Study of the 2500-2690 MHz Band: The Potential for Accommodating Third Generation Mobile Systems,” ET Docket No. 00-232, at 21 n.25 (November 15, 2000) (the “FCC Interim Report”). See also “Advanced Telecommunications in Rural America: The Challenge of Bringing Broadband Service to All Americans,” NTIA and U.S. Department of Agriculture, at 17 (April 2000).

³ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996 (Third Report)*, 17 FCC Rcd 2844, 2888 (2002).

⁴ *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1983; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Radio Services*, 15 FCC Rcd 17660, 17792 (2000).

Not surprisingly, then, the Commission has concluded that “in rural or otherwise underserved markets in the country, ITFS/MDS may be the *sole* provider of broadband service,”⁵ and indeed MDS/ITFS broadband service is already being deployed in rural areas. To cite just a few examples:

- On January 8, 2003, Navini Networks, Inc. (“Navini”) and Rioplex Wireless, Ltd. (“Rioplex”) announced plans to deploy a non-line-of-sight (“NLOS”) MDS/ITFS-based wireless broadband network to serve customers in the lower Rio Grande Valley, an area covering much of South Texas. The deployment will be the first full coverage broadband service in the area (encompassing 5,000 square miles), and will provide service to every county in the Rio Grande Valley from Western Rio Grande City to South Padre Island.⁶
- NextNet Wireless and MDS/ITFS service provider Evertek, Inc. recently announced that they have expanded NextNet’s NLOS Expedience broadband wireless access system across five new Iowa markets, having already launched the service in Pocahontas, Iowa in December 2001. The expansion covers over 19,000 subscribers in Sheldon, LeMars, Kingsley, Holstein, and Ida Grove, IA.⁷ Also, NextNet and Grand Forks Wireless are delivering MDS/ITFS-based broadband service to residential and business subscribers in Yuma, Arizona.⁸
- W.A.T.C.H. TV, an MDS/ITFS multichannel video operator serving approximately 11,000 subscribers in rural communities in northwest Ohio, has launched MDS/ITFS-based broadband service under the name W.A.T.C.H. TV Cobra.⁹
- Teewinot Wireless Data has launched MDS/ITFS-based 3G wireless broadband service in Missoula, Montana. As observed by Senator Conrad Burns (R-Montana) at the launch of the service, “[p]eople in rural states like Montana need

⁵ FCC Interim Report at 22 (emphasis added).

⁶ See “Rioplex Wireless Deploying World’s Largest Next-Generation Wireless Broadband Network,” *PR Newswire* (Jan. 8, 2003).

⁷ See “NextNet and Evertek Expand Plug-and-Play Broadband Wireless System to Five New Markets, Covering Over 19,000 Subscribers,” *Business Wire* (Nov. 11, 2002).

⁸ See “NextNet and Grand Forks Wireless Deliver Broadband Wireless Access to Yuma, Arizona,” *Business Wire* (June 25, 2002).

⁹ See, e.g., Barthold, “W.A.T.C.H. Out!” *Telephony* (Aug. 27, 2001).

to have access like this to ensure their inclusion in the rapidly expanding information age. . . A solid technological infrastructure such as this is part of the foundation needed to encourage small business growth in our communities.”¹⁰

Unfortunately, notwithstanding this progress, MDS/ITFS providers continue to be hamstrung by legacy “command and control,” broadcast-like regulation that creates substantial roadblocks to rapid deployment of MDS/ITFS-based broadband service in rural areas. Indeed, the current regulatory framework for MDS/ITFS already is highly inefficient for line of sight “first generation” MDS/ITFS broadband service, and has now been rendered wholly obsolete by the evolution of the service to cellularized, lower power, non-line of sight “next generation” technology that allows for not only fixed services, but also portable broadband service to the growing base of laptop and Personal Digital Assistant (“PDA”) users.¹¹

Most importantly for purposes of this proceeding, the current MDS/ITFS regulatory framework, with its convoluted, broadcast style of interference analysis, application process and licensing, imposes entirely excessive transaction costs (both in terms of time and money) on

¹⁰ See generally Mansell, “IPWireless Gaining Customers,” *Kagan Broadband Fixed Wireless*, at 6 (May 6, 2002); Rush, “3G Arrives in Montana,” *CED Broadband Direct* (June 3, 2002); “3G Broadband Wireless Comes to Montana; U.S. Senator Conrad Burns Hails the Nation’s First Mobile Broadband Deployment,” <http://www.teewinot.tv/PR060302.htm> (June 3, 2002). The MDS/ITFS industry continues to conduct trials of MDS/ITFS broadband service in various markets, which in turn will pave the way for additional deployments in both rural and non-rural areas. See, e.g., Mansell, *supra* (“Sprint . . . along with [MDS/ITFS operator] Nucentrix, are now trialing a new generation of [MDS/ITFS broadband equipment] suppliers led by the likes of Navini, IPWireless, Vyyo, Iospan, BeamReach and NextNet.”).

¹¹ While first generation technology is likely to continue to have a role in the industry for some time, the early experience of MDS/ITFS broadband providers demonstrated how the technology’s requirement of an unobstructed direct line-of-sight path between the base station antenna and the subscriber imposed significant limitations on system operators. Among other things, even where a line of sight path exists, the operator of a first generation system is required to professionally install reception equipment at every subscriber location, and each installation costs the operator far more than the marketplace allows it to recover in installation fees. Furthermore, the line of sight requirement means that expensive “truck rolls” often are made to potential subscribers that ultimately cannot be served because no unobstructed path exists between their location and a base station. See “A Proposal for Revising The MDS and ITFS Regulatory Regime,” The Wireless Communications Association International, Inc. *et al.*, RM-10586, at 4-5 (filed Oct. 7, 2002) (the “MDS/ITFS White Paper”).

providers of MDS/ITFS broadband service. As difficult as those costs are for broadband service providers in general, they are particularly onerous for those desiring to serve rural areas, where they are unable to spread those costs over a larger number of subscribers. As noted by the National Telecommunications Cooperative Association:

Rural carriers are especially hard hit by burdensome, unnecessary regulations. These carriers lack the staff and financial resources of major market players who can seek countless waivers to meet their specific needs for exceptions to general rules. However, wireless technology may provide the difficult “last mile” link to the most remote areas of rural America, areas that are very expensive, if not virtually impossible to reach via wired technology. Rural carriers should be encouraged to experiment with their wireless licenses so that they may provide service to previously unserved subscribers and bring the benefits of broadband to areas where other technologies are too costly or unavailable. However, under current regulation, every modification to a [MDS/ITFS] system, no matter how minor, takes significant time and resources.¹²

Fortunately, WCA, along with the National ITFS Association (“NIA”) and the Catholic Television Network (“CTN”) have taken a proactive approach and, on October 7, 2002, submitted a highly detailed, comprehensive proposal to rewrite the Commission’s MDS/ITFS rules in a manner that would eliminate the current regulatory obstacles to widespread deployment of MDS/ITFS broadband service.¹³ The Commission has already solicited and

¹² Comments of the National Telecommunications Cooperative Association, RM-10586, at 2 (filed Nov. 14, 2002).

¹³ More specifically, the proposal would (1) deinterleave the MDS/ITFS spectrum, such that highly cellularized systems can operate on fixed, portable and/or mobile bases without suffering interference from high power systems, and vice versa; (2) provide for continued downstream transmissions by high-power, high-site systems for operators who choose to remain in that mode; (3) eschew the current site-based licensing system and replace it with rules modeled on those in Part 27, thus permitting licensees the freedom to construct and operate facilities within geographic service areas, subject only to compliance with technical rules intended to minimize interference between systems, antenna structure requirements, and RF emission limits; (4) establish a market-by-market mechanism for transitioning MDS/ITFS video systems from their existing spectrum to appropriate spectrum in the new bandplan; and (5) remove regulatory underbrush and otherwise conform the MDS/ITFS rules to the regulatory framework generally used by the Wireless Telecommunications Bureau for other “flexible use” services. *See* MDS/ITFS White Paper at 11.

received public comment on the proposal,¹⁴ and the resulting record reflects near-unanimous support from the entire MDS/ITFS industry, particularly from prospective rural broadband operators.¹⁵ WCA understands that the Commission is well on its way towards adopting a *Notice of Proposed Rulemaking* on the proposal – given the pressing need for wireless broadband deployments in rural areas and the undisputed ability of MDS/ITFS providers to meet that need, it is essential that the Commission keep the WCA/NIA/CTN proposal on a fast track and adopt it on an expedited basis.

WHEREFORE, for the reasons set forth above, WCA reiterates its support for the public interest objectives of the *NOI* and urges the Commission to take immediate action towards adoption of the proposal advanced by WCA, NIA and CTN last year.

Respectfully submitted,

THE WIRELESS COMMUNICATIONS
ASSOCIATION INTERNATIONAL, INC.

By: /s/
Andrew Kreig
President

1140 Connecticut Avenue, N.W.
Suite 810
Washington, D.C. 20036-4001
(202) 452-7823

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¹⁴ See “Wireless Telecommunications Bureau Seeks Comment on Proposal to Revise Multichannel Multipoint Distribution Service And The Instructional Television Fixed Service Rules,” *Public Notice*, DA 02-2732A, RM-10586 (rel. Oct. 17, 2002). On November 14, 2002, the Bureau released a *Public Notice* extending the comment deadline to November 21, 2002 and the reply comment deadline to November 29, 2002, due to the unavailability of the Electronic Comment Filing System.

¹⁵ See, e.g., Comments of CNI Wireless, RM-10586 (filed Nov. 14, 2002); Letter from Thomas Knippen, W.A.T.C.H. TV, to Marlene H. Dortch, RM-10586 (filed Nov. 14, 2002); Reply Comments of NTELOS Inc., RM-10586 (filed Nov. 29, 2002).